

JOHNS HOPKINS TO OPEN IN BEAUTIFUL NEW BUILDINGS

Famous Old University Will Begin Fall Term in Quarters Modelled After Colonial Home of the Carrolls

THE new group of buildings which will constitute the future home of the Johns Hopkins University at Homewood, near Baltimore, is so far advanced in construction that the technical school of the university will be removed thither in time for the opening of the college term this fall. It is expected that by the fall of 1916 the entire equipment of the university, libraries, laboratories and classrooms will be located at the new site and that the old quarters in the business section of Baltimore will be permanently abandoned.

The group at Homewood has been projected for a score of years. The present site of the university was recognized, at the time of its selection, as too small for a permanent home. In 1876, when the Johns Hopkins University was founded, a tract of land, then far distant from the city, was provided as a location for the buildings. The trustees at that time decided that the distance to this site, which was John Hopkins' own estate of Clifton, was too great for the convenience of the students, this being before the day of trolley cars and jitneys, and as no funds were available for the erection of dormitories land was purchased in the business district of the city and brick buildings were erected on it sufficient in size for the needs of the university for the time being.

Within two decades it became apparent that the present quarters were too cramped and that if a real college life were to be built up at the university it would be necessary to provide living accommodations for the students. As the aim of the Johns Hopkins University has ever been primarily to train special investigators and teachers the undergraduate life was always more or less neglected, and at no time have there been more than 200 students in residence who were candidates for the degree of bachelor of arts. Students lived, and still live, in boarding houses or fraternity houses, and thus no community spirit has been fostered among the student body.

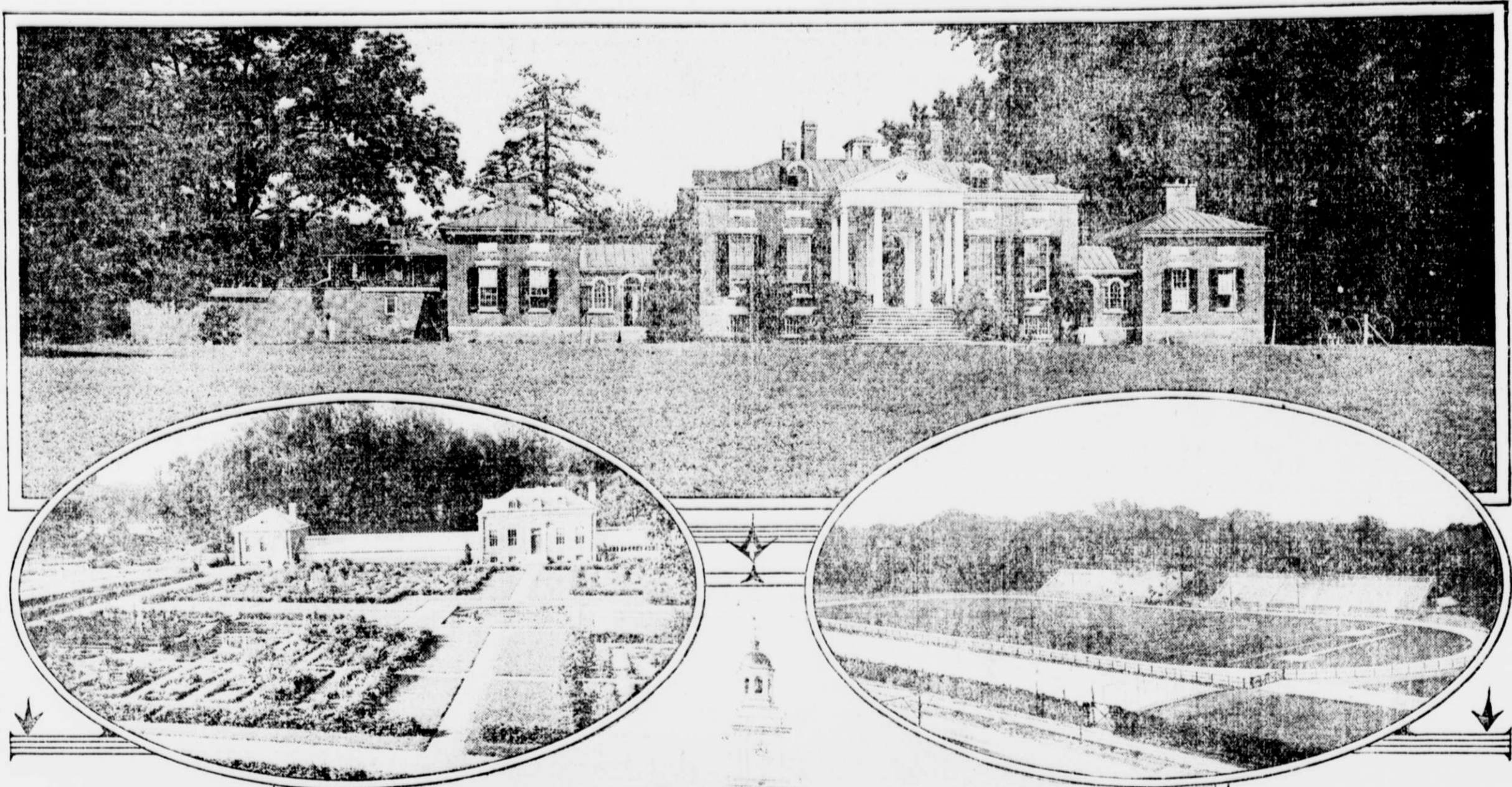
The movement for a broader undergraduate life came to a head upon the selection of Dr. Frank Johnson Goodnow, formerly professor of Jurisprudence in Columbia University, as president of the Johns Hopkins University, to succeed Dr. Ira Remsen, who resigned in 1912. Dr. Goodnow has shown himself in harmony with the undergraduate spirit and is enthusiastically in favor of the building of dormitories.

By 1906 it was realized by those interested in the growth of the Johns Hopkins University that the former quarters in the heart of the business district of Baltimore were too small for further use as the home of a great and developing university. The libraries and laboratories, which the site were overcrowded and entirely inadequate for the needs of the university.

Therefore in 1902 a large tract of land about two and a half miles from the center of Baltimore, within the city limits, and situated in what has become the most beautiful residential section of the city, was presented to the university by several public spirited citizens. Additions were made to the acreage by private gifts of the board of trustees and the property, as now held, contains 150 acres of beautiful rolling land, including many old and stately forest trees.

Because of shrinkage in values Johns Hopkins' endowment suffered greatly and a lack of funds handicapped the university and prevented the development of this site until about four years ago. At that time an appropriation from the Legislature of Maryland was made, by which \$600,000 became available for the building and equipping of a technical school as a branch of the Johns Hopkins University. The trustees seized upon this opportunity and made a campaign in Baltimore for funds to move the university to Homewood. As a result, a little over one million dollars was raised and the work at Homewood was commenced.

Plans were drawn up for a large group of buildings, nineteen in number. It was at once seen that the appropriation and endowment fund just raised would be sufficient for only a few of these buildings, and with a view to furnishing first-class quarters absolutely essential for the removal



The botanical gardens and laboratory.

to Homewood the authorities undertook the beginning of construction. An advisory board of architects was appointed, consisting of Frank Miles, of New York, and Frederick Law Olmsted, of Boston. These men looked over the field and mapped out the general plan which the whole group to be built was to follow.

It was decided that the architecture should be classical, to conform to the mansion already on the property and from which the site was named Homewood. This building, an exact reproduction of which is Maryland's representation at the Panama-Pacific exposition, was built in the first decade of the nineteenth century by Charles Carroll of Carrollton, the signer of the Declaration of Independence, for his only son. Upon its general and simple lines the whole plan of the Hopkins group was modeled.

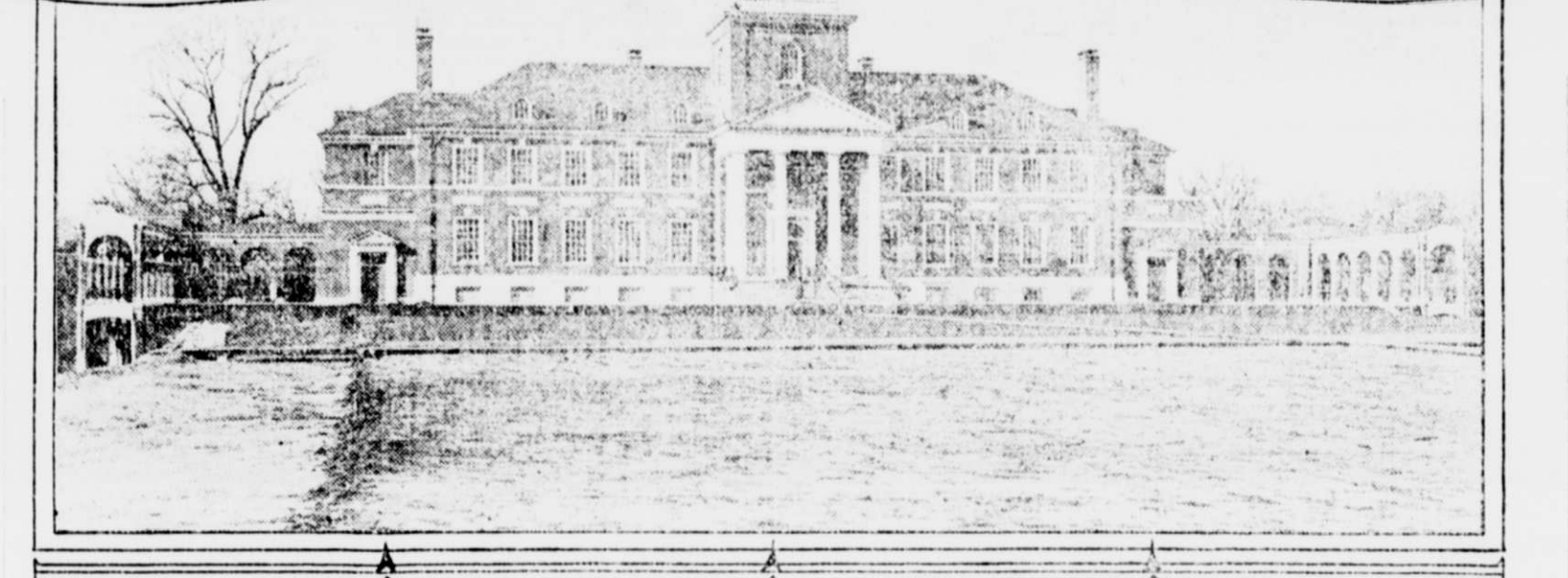
The old Carroll home will be retained as the Faculty Club, and opposite it will be erected an exact reproduction to serve as the residence of the president.

The architects of the group decided that the first building to go up should be the academic building, as it is popularly called, Gilman Hall, a memorial to Daniel Coit Gilman, the first president of the university. The question then arose as to the location of this building, and brought up the matter of the arrangement of the whole group in relation to one another.

The entrance to the university grounds is on Charles street, the most historic thoroughfare in Baltimore. To the north is University Parkway, a new and fashionable avenue. To the south and west lies Wyman's Park, one of the many wooded parks about Baltimore. Thus the setting of the new university group is naturally ideal.

Entering the grounds from Charles street the old Homewood mansion stands to the right on a slight elevation. In front of it is a graded semicircle. On the site of this box, opposite Homewood, is to be built the reproduction of the mansion. Between these two houses the site for the administration building is planned, and an arched gateway to one side of it will give access to the main quadrangle.

The main quadrangle has at the end opposite the administration building the imposing front of Gilman Hall, the academic building. To the right are the chemical laboratory and the biological laboratory, and on the left are the physical and geological buildings. All of these, when completed, will be furnished by the university, admitting passage from one to another



Gilman Hall, the academic building of the new Johns Hopkins University group at Homewood. Above—The Charles Carroll mansion at Homewood, the architectural motive of the new university buildings.

without exposure to the weather. At a level lower than the main quadrangle and to the left is the engineering building, which is now nearest completion. This will consist of a power house, a mechanical and civil engineering building, with heat, power, and water supply.

WOMAN WINS FAME AS ASTRONOMICAL MATHEMATICIAN
Mrs. Elizabeth Brown Davis Said to Be the Greatest Authority of Her Sex in This Abstruse Subject

MRS. ELIZABETH BROWN DAVIS, of Washington, is said to be the greatest authority of her sex upon astronomical mathematics in this country, probably in the world. She has been making computations for the Nautical Almanac, published annually by the United States Naval Observatory at Washington, for the past twenty-nine years.

Mrs. Davis began this work soon after her graduation from the George Washington University, under Prof. Simon Newcomb, the distinguished astronomer, who had charge of the Nautical Almanac for many years. During the early years of assisting Prof. Newcomb she took a post-graduate course in astronomy and mathematics at Johns Hopkins University, where doors opened to her before they were regularly opened to women upon the recommendation of Prof. Newcomb. From that time to this Mrs. Davis has made the computations for the Nautical Almanac.

The Nautical Almanac, for use in navigation, is published several years ahead, yet it gives the phases of the sun, moon and stars for every day of the year, and in some cases for every hour of the day. Today from the Almanac of 1916 and 1917 one may read the heavens for the next two years. As a consequence of this advance publication the phases must be computed from tables which are based upon former observations. The immense amount of infinitely minute and complicated calculations Mrs. Davis must make in a year may thus be realized in a general way.

French tables made in the early part of the nineteenth century were formerly used in the compilation of the Nautical Almanac, but in the latter part of that century Prof. Newcomb, having access to better observations and his own ideas in regard to them, made better tables, and from his work all computations have since been made for the Nautical Almanac, as well as for most similar works issued abroad.

Many and Spain should be divided, years she has been devoting a portion of her time to research work at the observatory, assisting in the computations of the orbits of Mars and other planets, and in the study of the movements of the satellites of Saturn. A great part of her computation work is done at home, but occasionally, when unpublished manuscripts are to be computed, they are taken from the observatory and the various scientific work is done from there.

"Which side of the work, the mathematical or the astronomical, appeals more strongly to your taste?" Mrs. Davis was asked.

"I love astronomy, but I have no taste for mathematics," she replied. "I had to go to Paris for one year and winter in the interest of my daughter's education. I took a model course at the Sorbonne under Gustave Darboux, one of the greatest of the great mathematicians of the world. I did not like it, but as my daughter was so young, I had to go. I went to Paris for one year and winter in the interest of my daughter's education."

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the university group is complete. Beyond the dormitories are the gymnasium and the athletic field, one of the finest and best equipped fields of its kind in the country. It contains a 220 yard straightaway, a circular quarter mile track, a baseball diamond and a football field, on which the game of football, in which Hopkins has so long been an intercollegiate champion, can also be played.

Gymnastic stands are along one side of the field, and spaces for the parking of automobiles are located on the other. If the attendance at games in the future increases greatly there is room at the end of the field for the erection of more stands. This athletic field has been in use for seven or eight years and was the first thing successfully finished at Homewood. The gymnasium will not be started until next year, when the removal of the university from its downtown quarters will take place.

The plans as here outlined are ambitious, and it will be years before they are fully completed. However, long study has been taken forward in the construction, and it is the plan of the university authorities to move the entire technical school to Homewood this fall, and in the fall of 1916 to have the whole academic work carried on in Gilman Hall and its tributary buildings.

Gilman Hall is complete. The mechanical engineering building is fully equipped and has been in use by students for a year. The power plant, which is a model of its kind, is now in operation. The botanical garden is in bloom and the laboratory attached to it has been used for some time. Before the first of October the chemical engineering building will be begun, and will be completed in time for 1916 work. If the plans of the university do not fall through the chemical laboratory, which is all that is needed for the removal of the university, is to be a model of its kind, and is a wealthy power manufacturing, who is interested in the university's progress.

Has Been Making Computations for the Nautical Almanac for the Past Twenty-nine Years

Gilman Hall is the dominant feature of the Homewood group, and it is unusual in every way, both inside and out. It is situated on the bend of the main quadrangle, with its graceful archway, embodying the spirit of the whole Hopkins site. Gilman Hall features, with all the simplicity and beauty which that term implies.

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There is not now any plan to remove the Johns Hopkins Medical School from its present quarters in the city. The medical department, with the great hospital as its center, has started in an open field in Baltimore, and while there is no room to expand the policy of the department has been to receive only a limited number of students each year, but to make these few thoroughly and to send them away as trained specialists, who will, in their turn, be of use to the university.

The new athletic field.

Within the building, directly facing the entrance portico, is a wide marble hall designed to be the site of a memorial to the late Daniel Coit Gilman. There is space over one stone fireplace for a portrait of the university's first president and over the other for a bust of him.

Passing through this room one comes to a passage leading back to the main reading room of the library; for Gilman Hall is essentially a library building and is built around the central library stacks. The reading room stretches across the whole rear of the building, having a floor area of 6,000 square feet, with shelves for thousands of volumes and for 500 periodicals. The floor is treated with a preparation of cork, thus making walking noiseless. The stack rooms of the library are on either side of the corridor leading to the reading room and rise the whole height of the building. Steel floors, steel cases and a system of fire prevention of the most modern kind have been installed to protect the thousands of fire among the priceless books upon which the university prides itself more than upon any other possession.

The whole library is divided into departmental branches. The offices of the faculty members have been arranged on each floor of the building and the seminar rooms for graduate work have been so placed that the library stacks containing books relating to any particular department are adjacent to the offices of the faculty members. Each instructor and professor has a personal office at least 12 by 20 feet.

In front of Gilman Hall there is an extensive lawn, which will be gradually enlarged as the quadrangle about it grows. Behind the central building lies the botanical garden and laboratory, in the summer a mass of gorgeous color. Plants from all parts of the world, rare specimens of exotic growths, are found here, thriving under the expert care of trained botanists and skilled gardeners.

The mechanical engineering building, already in use by the technical school, is a model embodying all the latest devices and suggestions in comfort and efficiency. The new one square, with its large windows, and the floor plan is well niched. In its rear, and connected to the building by a passageway is machinery hall, in reality the mechanical laboratory, where machinery of many kinds is kept for the instruction of the technical school. A crane is utilized to move the heavy machinery.

A power plant, heating and lighting the whole Homewood group, is located next to the mechanical building. In this plant there have been provided opportunities for original research for the students, and in this way will prove of great value to the technical school. From this plant pipes and wires are conducted in concrete tunnels to the various buildings. These tunnels are large enough for two men to pass each other in their standing upright.

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REAL DANGER OF FOOTBALL

THE "supreme moments" of football, and not the liability to accidents, are what put the sport in a danger class by itself according to a middle West educator who is now gathering data on the subject from universities, colleges and high schools. It is not the snapping of ankles and collarbones, the dislocation of shoulders and the smashing of noses that make football distinctive among college and high school games in the opinion of Dr. W. Franklin Jones, formerly of New York University, who heads the department of education at the University of South Dakota. It is those "supreme moments" when the player acts as a lightning bolt away between his arm and his ribs with the grand stands going mad and the opposing eleven leaping up before him ready to catapult themselves at him and stop his dash for victory.

Then, if he is a man, he risks to the game of responsibility, makes it a matter of life or death and pounds down the field with all his energy. It is his "supreme moment."

above 150, the high mark at which the insurance companies reject, the temperature for above normal, evidence of extreme nervous instability.

Moreover, these conditions still maintain, according to Dr. Jones, after the football season. They persist, he thinks, because of the frequency of football's supreme moments.

Applying the same blood pressure, temperature and nervous stability tests to athletes in basketball, Dr. Jones discovered a marked difference. Athletes at the University of South Dakota who were abnormal in their tests during the football season came back to normal in sports of strenuous, arduous basketball practice. Basketball offers as stiff exercise as football, but it hasn't those supreme moments of responsibility of football.

What is it that makes an athlete grow mad? Dr. Jones asked himself a few years ago.

It was the attempt to answer this question that has led to the present investigation of the physical condition among college and high school athletes. The educator had been an athlete himself and had felt the lurch on his energies which took the edge off his game without being able to find an explanation. He had asked doctors and been told that it was possible to accomplish a little indifference and other effects of physical strain. Then he started to find out for himself.



Mrs. Elizabeth Brown Davis.

Fine Old Homewood Estate Near Baltimore the Site—Ancestral Residence Now the Faculty Club